## **REMARKS/ARGUMENTS**

Claims 1-12 stand in the present application, independent claims 1 and 6 having been amended to more clearly patentably define over the cited references. Accordingly, reconsideration and favorable action is respectfully requested in view of the above amendments and the following remarks.

In the Office Action, the Examiner has rejected claims 1-12 under 35 U.S.C. § 103(a) as being unpatentable over Wolf et al. in view of Cooper. Applicant respectfully traverses the rejection.

The Examiner has rejected all claims over a combination of newly cited Cooper with previously cited Wolf. The Examiner asserts that all but one of the features of present claim 1 are present in the Wolf reference, and that the Cooper reference provides sufficient disclosure to make it obvious to modify the system of Wolf by providing the invention of Cooper. Applicant respectfully disagrees.

Applicant respectfully submits that at least a second feature is also absent from Wolf, and that the Cooper reference does not even disclose the feature that the Examiner agrees is missing. Moreover, Applicant submits that it would not have been obvious, on reading the two disclosures together, to provide any of the missing features, as will be explained in greater detail below.

The Examiner agrees that one feature absent from the Wolf reference is the identification of characteristics of audio and visual cues in the input stimulus. Wolf certainly mentions that audio-visual synchronisation measured with traditional test signals is not easily related to the perceptual audio-visual synchronisation of other video sequences. This, it should be noted, is in Wolf's discussion of the prior art. In the Wolf

reference individual video source features are extracted at the source and delivered by a communication circuit, separate from the transmission channel under test, to the destination instrument. This therefore requires a parallel communications circuit to be available. Wolf therefore avoids the problem solved by the present invention by using a parallel channel for a sample of the real signal. As the invention described by Wolf purports to solve the problem outlined in the passage bridging columns 2 and 3, it does not lead any one skilled in the art to look elsewhere for any other solutions.

Furthermore, the Examiner asserts that Cooper discloses the missing feature identification of characteristics of audio and visual cues in the stimulus. However, Applicant submits that Cooper has no such feature. Cooper is concerned with the accurate synchronisation of a "talking-head" audiovisual presentation, in particular solving the problem of "lip sync." It is assumed throughout the discussion in Cooper's specification that the input is indeed of this nature. There is no disclosure in Cooper of identifying whether the characteristics of these audio and visual cues relate to such a presentation as distinct from some other type such as a "voice over" presentation in which the speaker is not seen. It is the presence or absence of characteristics which are used in the present invention to identify the significance of the synchronisation errors. It would be understood that synchronisation is much more important in the presence of a combination of face and voice than if one or both is absent. Cooper does not address this problem at all, since it is assumed throughout that a "talking head" presentation is being used. Cooper is concerned with ensuring that synchronisation is very good in such circumstances, not with measuring how good or bad it is.

The Examiner also asserts that the use of human test panels in Wolf to generate a measure of subjective quality meets the third element of claim 1. This is simply not the case. The subjective human test panel generates its measure of subjective quality from the minds of the human testers. The absolute value of the synchronisation error and the identified characteristics of the information content are not used by Wolf to generate the measure of subjective quality, as is required by the present claims. The human testers do not make use of the output values of either the synchronisation errors or the identified characteristics of the information content, but generate their own results independently of any output other than the signal itself.

Item d) is also not found in Wolf. Wolf merely measures the absolute value of synchronisation error. The passage referred on column 14 lines 4 to 12 are merely concerned with whether a change in synchronisation would be perceived, as an absolute "yes/no" value. There is no disclosure of <a href="https://doi.org/10.100/journal.com/how/significant">how/significant</a> that perceived change in synchronisation would be in consequence of the information content as required by the present claims.

Accordingly, Cooper does <u>not</u> provide the element that the Examiner has identified as being missing from Wolf and, indeed, certain other features of claim I are also absent from the disclosure of the Wolf reference. Similar arguments relate to the apparatus claim, claim 6.

The Examiner correctly points out that Applicant cannot rely on features from a description to limit the scope of claim 1. However, the features identified by the Examiner to be in the cited art <u>do not meet the express claim requirements</u>, i.e., "characteristic features indicative of the significance of synchronisation errors" as they

do not in fact indicate whether such an error is in fact significant. To emphasize this point Applicant has amended claim 1, and in particular the item b) referred to by the Examiner, by amending it to read: "identifying characteristics of audio and visual cues in the stimulus that are indicative of the significance of synchronisation errors", and by referring back from element d) to element b) by referring to "said characteristic features."

Similar amendments have also been made to independent claim 6.

These amendments clarify the patentable distinction between Applicant's invention and the notional combination of Wolf and Cooper. Indeed, neither Wolf nor Cooper solve the problem identified in the present specification nor the invention recited in the present claims.

Therefore, in view of the above amendments and remarks, it is respectfully requested that the application be reconsidered and that all of claims 1-12, standing in the application, be allowed and that the case be passed to issue. If there are any other issues remaining which the Examiner believes could be resolved through either a supplemental response or an Examiner's amendment, the Examiner is respectfully requested to contact the undersigned at the local telephone exchange indicated below.

HOLLIER Appl. No. 09/701,514 May 17, 2005

Respectfully submitted,

**NIXON & VANDERHYE P.C.** 

By:

Chris-Com

Reg. No. 31,097

CC:lmr

901 North Glebe Road, 11th Floor

Arlington, VA 22203-1808 Telephone: (703) 816-4000 Facsimile: (703) 816-4100